

G8-UNESCO World FORUM on
Education, Research and Innovation:
New Partnership for Sustainable Development

Science and Innovation

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Session: Innovation and Society

Outline



- Introduction:
 - Need – technology – scientific discovery
 - Skilled people – interactive scientific and industrial environment
 - A significant number of today's big industries are relative newcomers
- Great challenges in science result in innovation
- Innovation in industry depends on science
- Conclusions

Great Challenges in Science and Innovation



- Fundamental science attracts the best scientists from everywhere
- Particle Physics at CERN, a data-intensive science requiring novel technologies
- WWW 15 years ago, Data Grids, e-Science now – revolutionary technologies
- “Open Access”, networked e-Repositories: realising today’s library of Alexandria?

Innovation in Industry



- A new idea, device realised and exploited
- Catalysts:
 - Customer needs, competition, science base
- Recipe of “innovation leaders”:
 - Excellent research
 - Promote, support interaction of science and industry
- “Greater” challenges (climate, food, health...)?
 - Governments prefer national or local challenges
 - Industry’s interest is short -term and profit-driven

Conclusions



- Innovation follows scientific discovery
- Information and Communication Technologies:
 - Enhance collaboration
- Improve the science/engineering base in less developed countries:
 - collaboration with G8 universities using ICT
 - Address common goals, share knowledge
- G8 and less developed countries together:
 - Bridge the digital divide!